CONTENTS

Tectonophysics Volume 175

Special Issue on Earthquake Source Processes (edited by S. Das and M. Ohnaka)
Preface VII

Observations and Theoretical Modelling
Seismicity before and after large shallow earthquakes around the Japanese islands
Mogi, K. (Tokyo, Japan) 1
Earthquake clustering on volcanic and tectonic structures
Neri, G. (Catania, Italy) 35
Earthquake swarm activity revealed from high-resolution relative hypocenters—clustering of microearthquakes
Ito, A. (Utsunomiya, Japan) 47
Seismic excitation and directivity of short-period body waves from a stochastic fault model
Koyama, J. (Sendai, Japan) and Izutani, Y. (Nagano, Japan) 67
High-amplitude seismic waves radiated from the bright spot of an earthquake
Umeda, Y. (Osaka, Japan) 81
Dynamic stress drop and rupture dynamics of the October 15, 1979 Imperial Valley, California, earthquake
Quin, H. (Palisades, N.Y., U.S.A.) 93
Analysis of the 1979 Tangshan earthquake process
Song Huizhen, Yuan Yanguang (Beijing, China) and Huang Liren (Tianjin, China) 119
Numerical modeling of ground deformation and source mechanism related to co-seismic change in gravitational potential
Huan-yen Loo, Yang-guang Yuan and Hui-zhen Song (Beijing, China) 131
Structural and fluid-chemical properties of seismogenic normal faults
Bruhn, R.L., Yonkee, W.A. and Parry, W.T. (Salt Lake City, Utah, U.S.A.) 139

Laboratory Studies
Effects of chemically active solutions on shearing behavior of a sandstone
Feucht, L.J. and Logan, J.M. (College Station, Tex., U.S.A.) 159
Effects of load point velocity on frictional instability behavior
Teng-fong Wong and Yusheng Zhao (Stony Brook, N.Y., U.S.A.) 177
Characteristic features of local breakdown near a crack-tip in the transition zone from nucleation to unstable rupture during stick-slip shear failure
Ohnaka, M. (Tokyo, Japan) and Kuwahara, Y. (Ibaraki, Japan) 197
Two types of brittle fracture of silicate rocks under confining pressure and their implications in the earth's crust
Shimada, M. and Cho, A. (Takatsuki, Japan) 221
The effect of confining pressure on stress-drop in compressive rock failure
Ismail, I.A.H. (Baghdad, Iraq) and Murrell, S.A.F. (London, U.K.) 237
Temporal variations in seismicity during quasi-static and dynamic rock failure
Meredith, P.G. (London, U.K.), Main, I.G. (Reading, U.K.) and Jones, C. (London, U.K.) 249
An experimental study of the strain field development prior to failure of a marble plate under compression
Huang Jiefan, Chen Ganglin, Zhao Yonghong and Wang Ren (Beijing, China) 269

Research Papers
Neocimmerian events in Central and Western Afghanistan
Boulin, J. (Marseille, France) 285
Magnetic studies of basement off the coast of Bombay, west of India
Gopala Rao, D. (Goa, India) 317
Opening mode of the Okinawa Trough: paleomagnetic evidence from the South Ryukyu Arc
Miki, M. (Kobe, Japan), Matsuda, T. (Himeji, Japan) and Otofuji, Y. (Kobe, Japan) 335
Subduction of Atlantic aseismic ridges and Late Cenozoic evolution of the Lesser Antilles island arc
Bouysse, P. and Westercamp, D. (Orléans, France) 349

Book Review
Triassic–Jurassic Rifting. Continental Breakup and the Origin of the Atlantic Ocean and Passive Margins by W. Manspeizer (Editor)—B. van der Pluijm 381